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Ministry
of
Health & Long-Term Care

Ontario

PROVINCIAL EQUIPMENT STANDARDS FOR ONTARIO AMBULANCE SERVICES

FOR

(USE OF ONTARIO LAND AND AIR AMBULANCE SERVICES)

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INTRODUCTION

Part A of this document outlines the approved basic life support equipment list for Ontario ambulance services and specifies the minimum quantities of each piece of equipment that are required to be carried on a land or air ambulance as per the Ambulance Act and specifies the applicable standard number. An approved equipment list for emergency response vehicles follows the equipment list for air and land ambulance services Part A also lists equipment without a provincial standard. Equipment items without a provincial standard are marked 'not applicable'.

Part B of this document contains the actual equipment standards. Note that some items in Part A lists which are required have not been included in the standards, as they already have standards associated to them in the public sector, or for which there is not a provincial standard developed yet.

The standards will avoid the use of latex where practical. Supplier to advise when latex is contained in the product.

PURPOSE

The equipment standards reflect current pre-hospital care practices in Ontario. The Purpose of setting equipment standards is to ensure that:

- The equipment complies with current patient care protocols;
- Only equipment that has been evaluated by the Ministry for use in the treatment of patients is carried in an ambulance or emergency response vehicle;
- Equipment has been evaluated by the Ministry in regard to occupational health and safety issues; and
- The equipment is compatible for use in an ambulance or emergency response vehicle.

LEGISLATED EQUIPMENT LIST

List 1 - Ambulance Accessory Equipment

List 2 - Ambulance Patient-Care/Transportation Equipment

List 3 - Emergency Response Vehicle Equipment

List 4 - Air Ambulance Basic Life Support Equipment List

List 5 - Land Ambulance Advanced Life Support Equipment and Drug List

LIST 1 - AMBULANCE ACCESSORY EQUIPMENT

Equipment Description (LAND)	Standard No.	Minimum Quantity
1. portable hand lights (with batteries) CSA approved	Not Applicable	2
2. fire extinguisher 2.268 kilograms (5 lb.) rated, minimum 3A10BC by the Underwriters' Laboratories of Canada, of a refillable type	Not Applicable	2
3. radio equipment: type, power, approved by Director	Not Applicable	1
4. mass casualty incident kit	See L2-105	1

LIST 2 - AMBULANCE PATIENT-CARE/TRANSPORTATION EQUIPMENT

Mandatory Equipment Description (LAND)	Standard No.	Minimum Quantity
1. oxygen cylinder, D size	See L2-075	3
2. oxygen pressure regulator with a litre flow control fitting	See L2-145	1
3. automatic transport ventilator complete with hansen connector, with one adult resuscitation mask (inflatable cuff type) and one adult resuscitation mask (non-inflatable cuff type), 1 head harness, hose	See L2-010	1
4. automatic transport ventilator diaphragms (spare) compatible with automatic transport ventilator	See L2-010	1
5. bag-valve mask resuscitator, adult	See L2-020	1
6. resuscitation mask adult (inflatable cuff type)	See L2-180	1
7. resuscitation mask adult (non-inflatable cuff type)	See L2-185	1
8. resuscitation mask paediatric (inflatable cuff type) (spare)	See L2-190	2
9. oxygen supply tubing	See L2-150	2
10. oxygen mask (with tubing) - adult; non-rebreathing type	See L2-120	3
11. oxygen mask (with tubing) - adult; simple type	See L2-125	3
12. oxygen mask (with tubing) - paediatric; simple type	See L2-130	3
13. oxygen nasal cannula (with tubing) - adult	See L2-135	2
14. airways oropharyngeal		
i. infant - 50 or 55 mm	See L2-005	4
ii. small child - 60 mm		4
iii. child - 70 mm		4
iv. small adult - 80 mm		4
v. adult - 100 mm		4
vi. large adult - 115 mm		4
15. airways nasopharyngeal (one-piece):		
i. #26FR with water soluble lubricant	See L2-001	3
Ii #30FR with water soluble lubricant		3
Iii #34FR with water soluble lubricant		3
16. blood pressure cuff adult	See L2-025	1
17. blood pressure cuff paediatric	See L2-030	1

Mandatory Equipment Description (LAND)	Standard No.	Minimum Quantity
18. stethoscope	See L2-240	1
19. gloves non-sterile (sizes various)	See L2-080	10
20. suction unit, hand operated:	See L2-290	1
complete with disposable suction cartridge,		1
suction catheter, double male connector		1
spare suction cartridge		1
21. mucus trap with neosafe bulb with #10FR catheter	See L2-110	1
22. 2.5 cm hypo allergenic tape	Not Applicable	3
23. 2.5 cm adhesive tape	Not Applicable	3
24. 5 cm hypo allergenic tape	Not Applicable	1
25. 10 cm x 10 cm gauze pads	Not Applicable	14
26. 20 cm x 25 cm gauze pads	Not Applicable	12
27. 10 cm x 4.5 m conforming gauze roll	Not Applicable	15
28. 15 cm x 4.5 m conforming gauze roll (abdominal pads)	Not Applicable	9
29. 100 cm x 100 cm x 140 cm triangular bandages	Not Applicable	18
30. pressure dressings (large)	See L2-160	8
31. pressure dressings (small)	See L2-165	6
32. eye pads	See L2-070	10
33. scissors, paramedic	See L2-195	2 pr
34. sterile saline or water 500 ml	See L2-235	4
35. antiseptic hand cleanser (approximately 110 ml – 120 ml. Squeeze or aerosol bottle)	Not Applicable	3
36. cot, lift assist	See L2-055	1
complete with one set combination chest/waist restraining safety straps with quick release buckle and one set horizontal with quick release leg buckle straps	See L2-170	
37. stretcher, folding	See L2-250	1
complete with one set combination chest/waist restraining safety straps with quick release buckle and one set horizontal with quick release leg buckle straps	See L2-255	
38. stair chair	See L2-225	1
complete with two sets safety restraining buckle straps	See L2-230	
39. stretcher, canvas complete with carrying poles	See L2-245	1
40. stretcher, scoop	See L2-265	1
complete with 4 sets safety restraining straps with buckles	See L2-175	

Mandatory Equipment Description (LAND)	Standard No.	Minimum Quantity
41. spinal board	See L2-205	2
complete with 4 sets safety restraining straps with buckles	See L2-175	
42. intravenous pole	See L2-100	1
43. cot, multi level lift-in stretcher (for dual cot Ambulances only)	See L2-060	1
44. oxygen cylinders (minimum of 1 M tank approved by Department of Transport Canada and Canadian Transport Commission; the minimum total capacity of the cylinders must be 4500 litres)	Not Applicable	1
45. oxygen pressure regulator for use with M cylinder	See L2-140	1
46. suction unit, vehicle mounted	See L2-300	1
47. suction unit, disposable collection bag	See L2-285	4
48. suction unit, tubing	See L2-295	2
49. suction tip, Yankeur	See L2-280	4
50. suction tip, wide bore (oral)	See L2-275	4
51. suction catheters sizes (coiled package only);		
i. #10FR	See L2-270	2
ii. #14FR		2
52. suction cartridge, spare - compatible with hand operated suction unit	Not Applicable	1
53. spare suction cartridge adapter tip, suction catheter, and double male connector - compatible with hand operated suction unit	See L2-290	1 ea.
54. wall oxygen flowmeter (0-15 lpm) assembly with adapter	See L2-305	1
i. humidifier unit storage bags	Not Applicable	2
ii. oxygen nipple adapter	Not Applicable	2
iii. oxygen humidifier	Not Applicable	1
55. bag-valve-mask resuscitator kit, paediatric	See L2-015	1
56. resuscitation mask paediatric (inflatable cuff type) (spare)	See L2-190	2
57. oxygen supply tubing	See L2-150	1
58. C.P.R. board	See L2-040	1
59. automatic transport ventilator diaphragms (spare) to be compatible with automatic transport ventilator	See L2-010	2
60. cervical collars:		
i. baby no-neck size collar;	See L2-045	2
ii. paediatric size collar;		2
iii. no-neck size collar;		3
iv. short size collar;		2

Mandatory Equipment Description (LAND)	Standard No.	Minimum Quantity
v. regular size collar;	See L2-045	3
vi. tall size collar ;		2
61. splints:		
i. multi-purpose/malleable splint;	See L2-215	4
ii. traction splint;	See L2-220	2
iii. spinal immobilization extrication device;	See L2-210	2
62. burn kit - (disposable, emergency)	See L2-035	1
63. obstetrical kit	See L2-115	1
64. blankets	Not Applicable	4
65. sheets, hypo allergenic	Not Applicable	8
66. blanket, disposable	Not Applicable	4
67. pillows, hypo allergenic	Not Applicable	2
68. terry cloth towels	Not Applicable	4
69. pillow case, cotton or equivalent	Not Applicable	6
70. safety helmet; (CSA approved with face shield, bracket, liner and chin strap)	Not Applicable	2
71. safety gloves premier 10 cm cuff;	Not Applicable	2pr
72. safety eye wear personal issue;	Not Applicable	1pr
73. high visibility vests;	Not Applicable	2
74. particulate respirator and surgical masks;	See L2-155	4
75. disposable coveralls; (med./large);	Not Applicable	6
76. contaminated material containment bags;	Not Applicable	6
77. box disposable tissues;	Not Applicable	1
78. bed pan plastic;	Not Applicable	1
79. urinal plastic;	Not Applicable	1
80. rescue blankets foil type;	Not Applicable	2
81. cold packs instant chemical type;	See L2-050	2
82. emesis bags, disposable;	Not Applicable	4
83. emesis basins;	Not Applicable	5
84. sharps container	See L2-200	1
85. toilet tissue roll	Not Applicable	1
86. infant restraint device	See L2-090	1

LIST 3 - EMERGENCY RESPONSE VEHICLE EQUIPMENT

Equipment Description (LAND)	Standard No.	Minimum Quantity
1. portable hand lights (with batteries) CSA approved	Not Applicable	2
2. fire extinguisher 2.268 kilograms (5 lb.) rated, minimum 3A10BC by the Underwriters' Laboratories of Canada, of a refillable type	Not Applicable	2
3. radio equipment:type, power, approved by Director	Not Applicable	1
4. mass casualty incident kit	See L2-105	1
5. first response kit	See L2-075	1
6. splints:		
i. multi-purpose/malleable splint;	See L2-215	6
ii. traction splint;	See L2-220	1
iii. spinal immobilization extrication device;	See L2-210	1
7. burn kit – (disposable, emergency)	See L2-035	1
8. obstetrical kit	See L2-115	1

LIST 4 – AIR AMBULANCE B.L.S. EQUIPMENT LIST

Equipment Description (AIR) Mandatory (Fixed Wing) Aircraft	Standard No.	Minimum Quantity
1. stretcher, folding complete with one set combination chest/waist restraining safety straps with quick release buckle and one set horizontal with quick release leg buckle straps	L2-250 / L2-255	1
2. stretcher rack(s)/securement device(s) system (Transport Canada approved) to secure stretcher equipment, compatible with the land ambulance system. The rack/securement device system must also be compatible within the Ministry's new Incubator Adapter Deck (IAD) used in Ontario land and air ambulances	Not Applicable	1
3. serviceable I.V. hook mounted at the highest point of the aircraft side wall or bulkhead or an I.V. pole (stretcher mounted, retractable folding type)	L2-100	1
4. static-proof blankets (hospital type)	Not Applicable	2
5. sheets (hospital type)	Not Applicable	2
6. towels, terrycloth	Not Applicable	2
7. pillow cases (hospital type)	Not Applicable	2
8. plastic sheet (hospital type)	Not Applicable	1
9. hypo-allergenic pillow (hospital type)	Not Applicable	1
10. Oxygen Module:		
i. resuscitation case	Not Applicable	1
ii. oxygen cylinder, "D" Size	Not Applicable	1
iii. oxygen regulator with a litre flow control fitting and handle	L2-145	1
iv. litre flow adapter	Not Applicable	1
v. adult bag-valve mask device complete with:	L2-020	
resuscitation mask adult (inflatable cuff type)	L2-180	1
oxygen reservoir	Not Applicable	1
vi. oxygen supply tubing	L2-150	1
vii. oxygen mask (& tubing) – adult simple type	Not Applicable	1
viii. oxygen mask (& tubing) – adult non-rebreathing type	L2-120	1
ix. oxygen mark (& tubing) – paediatric simple type	L2-130	1
x. nasal cannula	L2-135	1
xi. adult blood pressure cuff	L2-025	1

Equipment Description (AIR) Mandatory (Fixed Wing) Aircraft	Standard No.	Minimum Quantity
xii. stethoscope	L2-240	1
xiii. resuscitation mask adult (inflatable cuff type) (spare)	L2-180	1
xiv. pair medical grade, ambidextrous, non-latex synthetic, or better single use, powder free examination gloves	L2-080	1
10. Airways – Oral-pharyngeal:		
i. infant (50-55 mm)	L2-005	1
ii. small child (60 mm)		1
iii. child (70 mm)		1
iv. small adult (80 mm)		1
v. adult (100 mm)		1
vi. large adult (115 mm)		1
11. Airways – Naso-pharyngeal (one piece):		
i. #26FR with water soluble lubricant	L2-001	1
ii. #30FR with water soluble lubricant		1
iii. #34FR with water soluble lubricant		1
12. VVAC Suction unit handle complete with:		
i. disposable suction cartridge	L2-290	1
ii. protective cap		1
iii. adapter tip		1
iv. suction catheter		1
v. double male connector		1
vi. spare VVAC suction cartridge		1
13. First Aid Module:		
i. cervical collar (regular size)	L2-045	1
ii. cervical collar (no-neck size)		1
iii. roll 2.5 cm hypo-allergenic tape	Not Applicable	1
iv. roll 2.5 cm adhesive tape	Not Applicable	1
v. roll 5 cm hypo-allergenic tape	Not Applicable	1
vi. 10.2 cm x 10.2 cm gauze pads	Not Applicable	10
vii. 20.3 cm x 25.4 cm gauze pads	Not Applicable	4
viii. 10.2 cm kling	Not Applicable	3
ix. 15.2 cm kling	Not Applicable	3
x. triangular bandages	Not Applicable	6

Equipment Description (AIR) Mandatory (Fixed Wing) Aircraft	Standard No.	Minimum Quantity
xi. large pressure dressings	L2-160	2
xii. small pressure dressings	L2-165	4
xiii. eye pads	L2-070	4
xiv. scissors, paramedic	L2-195	1
xv. pair medical grade, ambidextrous, non-latex synthetic, or better single use, powder free examination gloves	L2-080	2
xvi. 500 ml sterile saline or water bag	L2-235	1
xvii. antiseptic hand cleaner (portable 114 ml or 142 ml squeeze bottle)	Not Applicable	2
14. Airways – Oral-pharyngeal:		
i. infant (50-55 mm)	L2-005	1
ii. small child (60 mm)		1
iii. child (70 mm)		1
iv. small adult (80 mm)		1
v. adult (100 mm)		1
vi. large adult (115 mm)		1
15. Resuscitation Equipment:		
i. oxygen marks (& tubing) adult simple type	L2-125	2
ii. oxygen masks (& tubing) adult non-rebreathing type	L2-120	2
iii. oxygen masks (& tubing) paediatric simple type	L2-130	2
iv. oxygen nasal cannula (& tubing) adult	L2-135	2
v. rolls oxygen supply tubing containing 213.4 cm each	L2-150	2
vi. resuscitation mask child (inflatable cuff type)	L2-190	2
vii. resuscitation mask adult (inflatable cuff type) (spare)	L2-180	2
viii. pressure administration cuff	Not Applicable	1
ix. bag-valve mask kit containing:	Not Applicable	
a. paediatric size bag	L2-015	1
b. resuscitation mask infant (inflatable cuff type)	L2-190	1
c. resuscitation mask paediatric (inflatable cuff type)		1
d. oxygen reservoir	L2-015	1
x. infant mucus trap, sterile, delee type with filter	L2-110	1
xi. humidifier with quick connect aqua pack, litre flow gauge, and adapter	Not Applicable	2
16. Airways – Oral-pharyngeal:		
i. infant (50-55 mm)	L2-005	1

Equipment Description (AIR) Mandatory (Fixed Wing) Aircraft	Standard No.	Minimum Quantity
ii. small child (60 mm)	L2-005	1
iii. child (70 mm)		1
iv. small adult (80 mm)		1
v. adult (100 mm)		1
vi. large adult (115 mm)		1
17. Airways – Naso-pharyngeal (one piece):		
i. #26FR with water soluble lubricant	L2-001	1
ii. #30FR with water soluble lubricant		1
iii. #34FR with water soluble lubricant		1
18. Suction Equipment:		
i. suction unit disposable collection bag	L2-285	4
ii. suction unit tubing (1.83 m in length)	L2-295	2
iii. suction catheters, size #10FR (coiled package only)	L2-270	2
iv. suction catheters, size #14FR (coiled package only)		2
v. Yanhauer suction tips	L2-280	4
vi. suction tip wide bore	L2-275	4
vii. spare VVAC suction cartridge	L2-290	1
viii. spare VVAC suction cartridge adapter tip		1
ix. spare VVAC suction catheter		1
x. spare VVAC suction double male connector		1
xi. resuscitation mask adult (inflatable cuff type) (spare)	L2-180	2
xii. bag-valve-mask kit containing		
a. paediatric size bag	L2-015	1
b. resuscitation mask infant (inflatable cuff type)	L2-190	1
c. resuscitation mask paediatric (inflatable cuff type)		1
d. oxygen reservoir bag	L2-015	1
19. First Aid Supplies:		
i. Dressing:		
a. rolls of 10.2 cm kling	Not Applicable	12
b. rolls of 15.2 cm kling	Not Applicable	6
c. triangular bandages	Not Applicable	12
d. 10.2 cm x 10.2 cm gauze pads	Not Applicable	24
e. 20.3 cm x 25.4 cm gauze pads	Not Applicable	8

Equipment Description (AIR) Mandatory (Fixed Wing) Aircraft		Standard No.	Minimum Quantity
	f. large pressure dressings	L2-160	6
	g. small pressure dressings	L2-165	12
	h. eye pads	L2-070	6
	i. rolls of 2.5 cm hypo-allergenic tape	Not Applicable	2
	j. rolls of 2.5 cm adhesive tape	Not Applicable	2
	k. scissors, paramedic	L2-195	1
ii.	Cervical Collars:		
	a. baby size collar	L2-045	1
	b. paediatric size collar		1
	c. no-neck size collar		1
	d. short size collar		1
	e. regular size collar		1
	f. tall size collar		1
iii.	Splints:		
	a. multi-purpose upper arm/lower leg (e.g. speed splint)	L2-215	4
	b. flexible foam aluminum (e.g. quick splint)		2
	c. Sager emergency traction splints model 204	L2-220	1
	d. spinal immobilization extrication device	L2-210	1
	e. rolled towels for use as a cervical immobilization device	Not Applicable	2
	f. scoop stretcher – quick connect type	L2-265	1
	g. scoop stretcher – quick connect safety straps	L2-175	4
iv.	Burn Kit:		
	a. 152.4 cm x 228.6 cm sterile burn sheet	L2-035	1
	b. 76.2 cm x 76.2 cm sterile burn sheets		2
	c. . 38.1 cm x 38.1 cm sterile burn sheets		2
	d. pair non-latex (CGSB approved) gloves, sterile, synthetic, powder free disposable gloves		2
	e. pair, masks, sterile, surgical		2
	f. gauze rolls, kling type, 4 inch width, sterile		4
	g. litre of irrigation fluid, sterile saline or sterile water, container labelled with "For Irrigation Purposes Only", if fluid is packaged in a bag it must be double bagged		1

Equipment Description (AIR) Mandatory (Fixed Wing) Aircraft		Standard No.	Minimum Quantity
v.	Obstetrical Kit:		
a.	pair non-latex (CGSB approved) gloves, sterile, synthetic, powder free disposable gloves	L2-115	2
b.	incontinent pad, size 61 cm x 121.9 cm, sterile, disposable		1
c.	umbilical cord clamps, sterile		2
d.	towelettes, obstetrical type		2
e.	pair scissors, sterile		1
f.	obstetrical pad, sterile		1
g.	receiving blanket, heat retaining, 100% cotton flannelette, white with no tattered edges		1
h.	gauze pads, size 10.2 cm x 10.2 cm		6
i.	mucous trap, sterile, with neosafe bulb or similar feature		1
j.	alcohol wipes		2
k.	pair kelly forceps, disposable		2
l.	plastic bags		2
m.	twist ties		2
20.	Miscellaneous Equipment:		
i.	CPR board	L2-040	1
ii.	disposable face masks	L2-155	10
iii.	pair non-latex (CGSB approved) gloves, sterile, synthetic, powder free disposable gloves	L2-080	8
iv.	disposable coveralls (medium/large)	Not Applicable	6
v.	contaminated material containment bag	Not Applicable	6
vi.	box disposable tissue	Not Applicable	1
vii.	child blood pressure cuff	L2-030	1
viii.	bed pan	Not Applicable	1
ix.	urinal	Not Applicable	1
x.	reflective foil type disposable emergency blanket	Not Applicable	2
xi.	cold packs instant chemical type	L2-050	2
xii.	emesis bags (air sick bags) disposable	Not Applicable	4
xiii.	emesis basin (K-basis)	Not Applicable	5
xiv.	500 ml sterile saline or water bag	L2-235	2
xv.	antiseptic hand cleaner (portable 114 ml or 142 ml squeeze bottle)	Not Applicable	2

Equipment Description (AIR) Mandatory (Fixed Wing) Aircraft		Standard No.	Minimum Quantity
xvi.	30 cc disposable cups	Not Applicable	10
xvii.	bottle of mouthwash	Not Applicable	1
xviii.	lemon and glycerine mouth swabs	Not Applicable	4
xix.	toilet paper roll	Not Applicable	1
xx.	small garbage bags with ties	Not Applicable	5
xxi.	incontinent pads	Not Applicable	5
xxii.	tongue depressors	Not Applicable	10
xxiii.	towelettes	Not Applicable	3
xxiv.	bendable straws	Not Applicable	10
xxv.	safety pins	Not Applicable	10
xxvi.	assorted sized bandages	Not Applicable	20
xxvii.	one (1) litre bottles of water	Not Applicable	2
xxviii.	portable hand lights (with batteries) CSA approved	Not Applicable	2

Equipment Description (AIR) Mandatory (Rotary Wing) Aircraft	Standard No.	Minimum Quantity
1. adult BVM kit complete with oxygen reservoir and two seal easy masks	L2-020	1
2. paediatric BVM kit complete with oxygen reservoir and two resuscitation masks	L2-015	1
3. set of oral airways (one each of 50mm or 55mm, 60mm, 70mm, 80mm, 100mm, 115mm	L2-005	1
4. adult non-rebreather oxygen masks with tubing	L2-120	2
5. paediatric simple oxygen masks with tubing	L2-130	1
6. nasal cannula	L2-135	2
7. set of nasal airways (#26FR, #30FR, #34FR)	L2-001	1
8. oxygen supply tubing	L2-150	2
9. pair non-latex (CGSB approved) gloves, non-sterile, synthetic, powder free disposable gloves	L2-080	1 box
10. "D" size oxygen cylinder	Not Applicable	1
11. oxygen regulator complete with flow meter	L2-145	1
12. set of disposable suction catheters (sizes #5, #8, #10, #14, #16, #18, French with thumb control port)	L2-270	1
13. Yanhauer suction tips	L2-280	2
14. wide bore suction tips	Not Applicable	2
15. plastic eye cover	Not Applicable	1
16. pair non-latex (CGSB approved) gloves, sterile, synthetic, power free disposable gloves	L2-085	3
17. First Response Kit:		
i. cervical collar (regular size)	L2-045	1
ii. cervical collar (no-neck size)		1
Iii. roll 2.5 cm hypo-allergenic tape	Not Applicable	1
iv. roll 2.5 cm adhesive tape	Not Applicable	1
v. roll 5 cm hypo-allergenic tape	Not Applicable	1
vi. 10.2 cm x 10.2 cm gauze pads	Not Applicable	10
vii. 20.3 cm x 25.4 cm gauze pads	Not Applicable	4
viii. 10.2 cm kling	Not Applicable	3
ix. 15.2 cm kling	Not Applicable	3
x. triangular bandages	Not Applicable	6
xi. large pressure dressings	L2-160	2
xii. small pressure dressings	L2-165	4

Equipment Description (AIR) Mandatory (Rotary Wing) Aircraft	Standard No.	Minimum Quantity
xiii. eye pads	L2-070	4
xiv. pair EMA shears	Not Applicable	1
xv. pair non-latex (CGSB approved) gloves, sterile, synthetic, powder free disposable gloves	L2-085	2
xvi. 500 ml sterile saline or water bag	L2-235	1
xvii. antiseptic hand cleaner (portable 114 ml or 142 ml squeeze bottle)	Not Applicable	2
xviii. set of oral airways (one each of 50mm, 60mm, 70mm, 80mm, 100mm, 115mm)	L2-005	1
18. Stretcher:		
i. stretcher, folding complete with one set combination chest/waist restraining safety straps with quick release buckle and one set horizontal with quick release leg buckle straps	L2-250 L2-255	1
ii. stretcher rack(s)/securement device(s) system (Transport Canada approved) to secure stretcher equipment, compatible with the land ambulance system. The rack/securement device system must also be compatible within the Ministry's new Incubator Adapter Deck (IAD) used in Ontario land and air ambulances	Not Applicable	1
iii. serviceable I.V. hook mounted at the highest point of the aircraft side wall or bulkhead or an I.V. pole (stretcher mounted, retractable folding type)	L2-100	1
iv. static-proof blankets (hospital type)	Not Applicable	2
v. sheets (hospital type)	Not Applicable	2
vi. towels, terrycloth	Not Applicable	2
vii. pillow cases (hospital type)	Not Applicable	2
viii. plastic sheet (hospital type)	Not Applicable	1
ix. hypo-allergenic pillow (hospital type)	Not Applicable	1
19. Resuscitation Equipment:		
i. adult simple oxygen masks with tubing	L2-125	2
ii. adult non-rebreather oxygen masks with tubing	L2-120	2
iii. paediatric simple oxygen masks with tubing	L2-130	2
iv. adult oxygen nasal cannula with tubing	L2-135	2
v. oxygen supply tubing in 213.4 cm rolls	L2-150	2
vi. resuscitation mask child (inflatable cuff type)	L2-190	2
vii. resuscitation mask adult (inflatable cuff type) (spare)	L2-180	2
viii. pressure administration cuff	Not Applicable	1

Equipment Description (AIR) Mandatory (Rotary Wing) Aircraft	Standard No.	Minimum Quantity
ix. paediatric size bag-valve mask device complete with	L2-015	
a. resuscitation mask infant (inflatable cuff type)	L2-190	1
b. resuscitation mask paediatric (inflatable cuff type)		1
c. oxygen reservoir	L2-015	1
x. infant mucus trap, sterile, delee type with filter	L2-110	1
xi. oxygen humidifier/flow meter (0-15 lpm) assembly	Not Applicable	2
xii. set of oral airways (one each of 50mm or 55mm, 60mm, 70mm, 80mm, 100mm, 115mm)	L2-005	2
xiii. set of nasal airways with water soluble lubricant (one each of #26FR, #30FR, #34FR)	L2-001	2
xiv. resuscitation mask adult (inflatable cuff type) (spare)	L2-180	2
xv. bag-valve-mask kit containing:		
a. paediatric size bag	L2-015	1
b. resuscitation mask infant (inflatable cuff type)	L2-190	1
c. resuscitation mask paediatric (inflatable cuff type)		1
d. oxygen reservoir bag	L2-015	1
20. Suction Equipment:		
i. suction unit disposable collection bags	L2-285	4
ii. suction unit tubing (1.83 m in length)	L2-295	2
iii. suction catheters, size #10FR	L2-270	2
iv. suction catheters, size #14FR		2
v. Yanhauer suction tips	L2-280	4
vi. suction tip wide bore	L2-275	4
21. First Aid Supplies (Dressings):		
i. rolls of 4 10.2 cm kling	Not Applicable	12
ii. rolls of 6 15.2 cm kling	Not Applicable	6
iii. triangular bandages	Not Applicable	12
iv. 10.2 cm x 10.2 cm gauze pads	Not Applicable	24
v. 20.3 cm x 25.4 cm gauze pads	Not Applicable	8
vi. large pressure dressings	L2-160	6
vii. small pressure dressings	L2-165	12
viii. eye pads	L2-070	6
ix. rolls of 2.5 cm hypo-allergenic tape	Not Applicable	2

Equipment Description (AIR) Mandatory (Rotary Wing) Aircraft	Standard No.	Minimum Quantity
x. rolls or 2.5 cm adhesive tape	Not Applicable	2
xi. scissors, paramedic	L2-195	1
22. Cervical Collars:		
i. baby size collar	L2-045	1
ii. paediatric size collar		1
iii. no-neck size collar		1
iv. short size collar		1
v. regular size collar		1
vi. tall size collar		1
23. Splints:		
i. multi-purpose upper arm/lower leg (e.g. speed splint)	L2-215	4
ii. flexible foam aluminium (e.g. quick splint)		2
iii. Sager emergency traction splint model 204	L2-220	1
iv. spinal boards	L2-205	1
v. safety restraining straps with buckles; for use on fracture boards	L2-175	8
vi. scoop stretcher – quick connect type	L2-265	1
vii. scoop stretcher – quick connect safety straps	L2-175	1
viii. spinal immobilization extrication device	L2-210	1
ix. rolled towels for use as a cervical immobilization device	Not Applicable	2
24. Burn Kit:		
i. 152.4 cm x 228.6 cm sterile burn sheet	L2-035	1
ii. 76.2 cm x 76.2 cm sterile burn sheets		2
iii. 38.1 cm x 38.1 cm sterile burn sheets		2
iv. pair non-latex (CGSB approved) gloves, sterile, synthetic, powder free disposable gloves		2
v. surgical mask, sterile		2
vi. gauze rolls, kling type, 10.2 cm width, sterile		4
vii. litre of irrigation fluid, sterile saline or sterile water, container labelled with "For Irrigation Purposes Only", if fluid is packaged in a bag it must be double bagged		1
25. Obstetrical Kit:		
i. pair non-latex (CGSB approved) gloves, sterile, synthetic, powder free disposable gloves	L2-115	2

Equipment Description (AIR) Mandatory (Rotary Wing) Aircraft	Standard No.	Minimum Quantity
ii. incontinent pad, 61 cm x 121.9 cm, sterile, disposable	L2-115	1
iii. umbilical cord clamps, sterile		2
iv. towelettes, obstetrical type		2
v. pair scissors, sterile		1
vi. obstetrical pad, sterile		1
vii. receiving blanket, head retaining, 100% cotton flannelette, white		1
viii. 10.2 cm x 10.2 cm gauze pads		6
ix. mucous trap, with neo-safe (neo-nate) bulb, sterile, delee type with filter		1
x. towels, disposable		4
xi. alcohol wipes		2
xii. pair Kelly forceps, disposable		2
xiii. plastic bags		2
xiv. twist ties		2
26. Miscellaneous Equipment:		
i. stethoscope	L2-240	1
ii. CPR board		1
iii. disposable surgical face masks	L2-155	10
iv. pair non-latex (CGSB approved) gloves, sterile, synthetic, powder free disposable gloves	L2-085	8
v. disposable coveralls (medium/large)	Not Applicable	2
vi. contaminated material containment bags	Not Applicable	6
vii. disposable tissues	Not Applicable	1 box
viii. bedpan	Not Applicable	1
ix. urinal	Not Applicable	1
x. reflective foil type disposable emergency blankets	Not Applicable	2
xi. cold packs instant chemical type	L2-050	2
xii. emesis bags (air sickness bags) disposable	Not Applicable	4
xiii. emesis basins (K-basins)	Not Applicable	5
xiv. 500 ml sterile saline or water bags	L2-235	2
xv. antiseptic hand cleaner (portable 114 ml or 142 ml squeeze bottle)	Not Applicable	1
xvi. 30 cc disposable cups	Not Applicable	10
xvii. bottle of mouthwash	Not Applicable	1
xviii. lemon and glycerine mouth swabs	Not Applicable	4

Equipment Description (AIR) Mandatory (Rotary Wing) Aircraft		Standard No.	Minimum Quantity
xix.	toilet paper roll	Not Applicable	1
xx.	small garbage bags with ties	Not Applicable	5
xxi.	incontinent pads	Not Applicable	5
xxii.	tongue depressors	Not Applicable	10
xxiii.	towelettes	Not Applicable	3
xxiv.	bendable straws	Not Applicable	10
xxv.	safety pins	Not Applicable	10
xxvi.	assorted sized bandages	Not Applicable	20
xxvii.	one (1) litre bottles of water	Not Applicable	2
xxviii.	retro-reflective first aid vest for "D" type oxygen cylinder and first aid supplies	Not Applicable	1
xxix.	a minimum of one (1) spare "D" size medical oxygen cylinder	Not Applicable	2
xxx.	portable hand lights (with batteries) CSA approved	Not Applicable	2
xxxi.	extrication tool kit	Not Applicable	1
xxxii.	tool pouch	Not Applicable	1
xxxiii.	pliers	Not Applicable	1
xxxiv.	window punch	Not Applicable	1
xxxv.	screw driver (approximately 4.7cm) multiple head polyurethane handle	Not Applicable	1
xxxvi.	hacksaw with three spare (carbide) replacement blades	Not Applicable	1
xxxvii.	extra large blood pressure cuff	Not Applicable	1
xxxviii.	safety helmet; (CSA approved with face shield, bracket, liner and chin strap)	Not Applicable	2

LIST 5 – LAND AMBULANCE ADVANCED LIFE SUPPORT (Equipment and Drug List)

Ambulance services require the Director's approval to carry the following equipment and drugs in addition to equipment listed in the Approved Basic Ambulance Equipment lists. Deviations from this list require the Director's approval.

Services approved to carry the equipment in this list are exempt from having to carry the standard First Response Kit Oxygen module and the VVAC portable suction unit.

Note: *Optional equipment training is the responsibility of the Base Hospital.*

Land Ambulance Advanced Life Support (Equipment & Drug List)		Minimum Quantity
1.	Defibrillator Must be of weight and size dimensions that can be safely stored in the vehicle within which it will be used. Approval must be preceded by submission of an equipment request form.	1
2.	Defibrillator accessories (stored in the defibrillator pouch)	
i)	packages of large defibrillator pads	2
ii)	ECG monitoring pads	18
iii)	"three lead" ECG cable	1
iv)	manual module	1
v)	semi automatic module	1
vi)	razor	1
vii)	towel	1
viii)	spare battery	1
ix)	ECG paper (spare)	1
3.	Advanced airway/oxygen bag soft sided kit., maximum loaded weight 12.244 kilograms (27 lbs.)	1
i)	adult BVM kit complete with oxygen reservoir and two seal easy masks	1
ii)	paediatric BVM kit complete with oxygen reservoir and one cuffed resuscitation mask	1
iii)	set of oral airways (one each of 50mm or 55 mm, 60mm, 70mm, 80mm, 100mm, 115mm)	1

Land Ambulance Advanced Life Support (Equipment & Drug List)		Minimum Quantity
iv)	adult non-rebreather oxygen masks with tubing	1
v)	paediatric simple oxygen mask with tubing	1
vi)	nasal cannula	1
vii)	set of nasal airways (26F, 30F, 34F)	1
viii)	oxygen supply tubing	1
ix)	set of endotracheal tubes:	
	a) #8 (cuffed)	1
	b) #7 (cuffed)	1
	c) #6 (cuffed)	1
	d) #5.5 (uncuffed)	1
	e) #5.0 (uncuffed)	1
	f) #4.5 (uncuffed)	1
	g) #4.0 (uncuffed)	1
	h) #3.5 (uncuffed)	1
	i) #3.0 (uncuffed)	1
	j) #2.5 (uncuffed)	1
x)	set of nasal endotrol:	
	a) #8	1
	b) #7	1
	c) #6	1
xi)	Laryngoscope complete with spare bulb	1
xii)	Miller (straight) blade (size 1,4)	1
xiii)	MacIntosh curved blades (size 1,2, 3 & 4)	1
xiv)	Magill – adult	1
xv)	Magill – paediatric	1
xvi)	ETT adapter (butterfly valve for MDI ventolin)	1
xvii)	tube extender 15.2 cm	1
xviii)	swivel adapter	1
xvix)	patient circuit	1
xx)	single use topical vasoconstrictor	1
xxi)	Lidocaine spray 10mg with nozzle	1
xxii)	tube ties	2
xxiii)	stylet – adult	1

Land Ambulance Advanced Life Support (Equipment & Drug List)		Minimum Quantity
xxiv)	stylet – paediatric	1
xxv)	syringes (10cc)	2
xxvi)	tubes and or packetts of water soluble lubricant	2
xxvii)	heimlich valve (for needle decompression)	1
xxviii)	roll pink waterproof tape	1
xxix)	easy cap (CO2 detector) and or Esophageal Detector Device (EDD)	1
4.	Oral Suction Unit (integral to the airway bag)	1
i)	set of disposable suction catheters (sizes #5, #8, #10, #14, #16, #18 French with thumb control port)	1
ii)	Yankauer suction tips	1
iii)	backup batteries for compact suction unit	1
iv)	plastic eyecover	1
v)	pair (CGSB approved) examination gloves	2
vi)	meconium suction device	(Optional)
5.	Intravenous and Drug Bag soft sided kit., maximum weight 9.07 kilograms (20 lbs.), dimensions are 55.9 cm long x 35.6 cm wide 27.9 cm high	1
i)	small disposable sharps container	1
ii)	glucometer for blood glucose testing, with lancets and test strips	1
iii)	pressure infuser bag	1
iv)	secure method of storing and carrying narcotics	1
v)	a total of 1 litre of N/S solution bags, any combination of size	
vi)	saline flush solutions	2
vii)	intraosseous needles #15 or #16	1
viii)	intraosseous needles #18	1
ix)	disposable I.V. catheters:	
	a) 14 x 1 ¼ gauge	2
	b) 14 x 2 gauge	2
	c) 16 x 1 ¼ gauge	2
	d) 18 x 1 ¼ gauge	2
	e) 20 x 1 ¼ gauge	2
	f) 22 x 1 gauge	2
	g) 24 x ¾ gauge	2
x)	Y connector	(Optional)

	Land Ambulance Advanced Life Support (Equipment & Drug List)	Minimum Quantity
xi)	tourniquets	2
xii)	hot pack	(Optional)
xiii)	disposable razor	1
xiv)	2.5 cm tape, clear, hypo allergenic (roll)	1
xv)	2.5 cm white cloth tape	1
xvi)	band-aids	2
xvii)	disposable plastic syringes:	
	a) 10 cc	2
	b) 3 cc	2
	c) 1 cc with 26 gauge needle	2
xviii)	sterile needles:	
	a) #18 gauge	2
	b) #22 gauge	2
	c) #25 gauge	2
xix)	piggyback mechanism	1
xx)	tegaderm or op-site clear sterile dressings	6
xxi)	2.5 cm tape, clear, non-allergic, water resistant (roll)	1
xxii)	adult BP cuff	1
xxiii)	adult BP cuff (large)	1
xxiv)	paediatric BP cuff	1
xxv)	dressings (trauma use):	
	a) 10.2 cm x 10.2 cm gauze	4
	b) kling roll	2
	c) 5.1 cm x 5.1 cm gauze	4
	d) large pressure dressings	1
	e) small pressure dressings	1
xxvi)	IV tubing:	
	a) macro drip	1
	b) microdrip with buretrol set	1
	c) saline locks	2
xxvii)	adult ventolin mask set	1
	a) paediatric ventolin mask set	1
	b) ET adapter	1

Land Ambulance Advanced Life Support (Equipment & Drug List)	Minimum Quantity
xxviii) alcohol swabs	6
6. Drugs:	
i) MDI Ventolin (100ug/puff, 200 doses)	1
ii) Ventolin nebules (5mg and/or 2.5mg and/or 1.25mg in 2.5cc)	25mg total
iii) Nitroglycerine spray canisters (0.4 mg/spray, 75 doses)	1
iv) pre-loaded Epinephrine 1:10,000 (1mg/10ml)	6
v) *Epinephrine 1:1000 (1mg/1ml) vials	10
vi) Dopamine HCL 400mg/250 cc	1 bag
vii) or pre-loaded Dopamine HCL 200mg/5ml (if available)	2
viii) *pre-loaded Lidocaine 100mg/5ml	3
ix) *pre-loaded Furosemide 40mg/4ml	3
x) *pre-loaded Atropine Sulphate 1mg/10ml	6
xi) *pre-loaded 50% Dextrose (25g/50ml)	1
xii) *pre-loaded Sodium Bicarbonate 50 mEq/50ml	1
xiii) Naloxone	4 mg total
xiv) Diazepam 10mg/2ml vials	3
xv) Morphine Sulphate	10mg total
xvi) Adenosine (6mg and/or 12mg preload)	30mg total
xvii) ASA 80mg/per dose	10 tab
xviii) Oral glucose paste	2
xix) Glucagon (1mg/ml)	1
xx) protective carrying case for glass ampoules	1
7. ALS Back Up Kit	
soft sided kit, maximum loaded weight 12.244 kilograms (27 lbs.)	1
i) set of endotracheal tubes	1
ii) spare laryngoscope and blades	1
iii) set of spare batteries for the laryngoscope	1
iv) bulbs for the laryngoscope	1
v) adult stylet	2
vi) paediatric stylet	1
vii) tube ties	1
viii) a total of 3 litres of N/S solution bags	2
ix) saline flush	6

Land Ambulance Advanced Life Support (Equipment & Drug List)	Minimum Quantity
x) I.V. tubing:	
a) macrodrips	3
b) micro drip (with a buretrol)	2
c) saline locks	6
xi) disposable I.V. catheters:	
a) 14 x 1 ¼ gauge	5
b) 14 x 2 gauge	5
c) 16 x 1 ¼ gauge	10
d) 18 x 1 ¼ gauge	10
e) 20 x 1 ¼ gauge	10
f) 22 x 1 gauge	5
g) 24 x 1 gauge	5
xii) a) 2.5 cm tape, clear, hypo allergenic (roll)	1
b) 2.5 cm tape, plastic (roll)	1
xiii) adult ventolin mask set	1
a) paediatric ventolin mask set	1
b) ET adapter	1
xiv) easy cap (CO_2 detector) and/or Esophageal Detective Device (EDD)	1
xv) tourniquets	1
xvi) sterile needles:	2
a) #18 gauge	4
b) #22 gauge	4
c) #25 gauge	4
xvii) disposable plastic syringes:	2
a) 10 cc	2
b) 3 cc	2
c) 1 cc with 26 gauge needle	1
8. Drugs: (Back up)	25mg total
i) MDI Ventolin (100ug/puff, 200 doses)	1
ii) Ventolin nebules (5mg and/or 2.5mg and/or 1.25mg in 2.5cc)	10
iii) Nitroglycerin spray canisters (0.4 mg/spray, 75 doses)	10
iv) *pre-loaded Epinephrine 1:10,000 (1mg/10ml)	
v) *Epinephrine 1:1000 (1mg/1ml) vials	

	Land Ambulance Advanced Life Support (Equipment & Drug List)	Minimum Quantity
vi)	Dopamine HCL 400mg/250 cc	1 bag
vii)	**or** pre-loaded Dopamine HCL 200mg/5ml (if available)	2
viii)	*pre-loaded Lidocaine 100mg/5ml	6
ix)	*pre-loaded Furosemide 40mg/4ml	4
x)	*pre-loaded Atropine Sulphate 1mg/10ml	6
xi)	*pre-loaded 50% Dextrose (25g/50ml)	2
xii)	*pre-loaded Sodium Bicarbonate 50 mEq/50ml	1
xiii)	Naloxone	3 ampoules
xiv)	Diazepam 10mg/2ml vials	3
xv)	Morphine Sulphate not to exceed 40 mg per vehicle	
xvi)	Adenosine (6mg and/or 12mg preload)	30mg total
xvii)	ASA 80mg/per dose	10 tab
xviii)	Lidocane spray 10mg with nozzle	1
xix)	single use topical vasoconstrictor	1
xx)	protective carrying case for glass ampoules	1
xxi)	secure method of storing and carrying Narcotics	(Optional)

*Note: *For the drugs marked by an asterisk above, these are minimum quantities, which may be increased with EHS approval, if a particular program needs* to carry more.

BASIC LIFE SUPPORT EQUIPMENT STANDARD

L2-001

AIRWAY, NASOPHARYNGEAL

A device intended to maintain the patency of respiratory passages through the nasal cavity into the pharynx.

Minimum Requirements:

The nasopharyngeal airway must be:

- Constructed of a soft, sterile, non-latex medical grade material. The nasopharyngeal airway shall be constructed to prevent kinking in use;
- Designed with the buccal end (flanged end) - the end of the airway that is flanged and is expected to fit against the external nares. The pharyngeal end - the end of the airway that is intended to be inserted into the patient's pharynx, shall be beveled;
- Provided in a variety of sizes for adults, e.g. 26, 30 and 34 French;
- Compatible with all currently approved face masks as per the equipment standards list;
- Individually packaged with a packet of water soluble lubricant;
- For single patient use. Packages containing such airways shall be marked "Single Use Only" or "Do Not Reuse". The size of the airway shall be readily apparent on examination of the package. The size should be marked on the package label in bold print for ease of identification;
- Airway shall be packaged as sterile in properly sealed packages capable of maintaining the sterile integrity of the airway under normal conditions of shipping and storage. The word "Sterile" shall be readily apparent on examination of the package.

L2-001

AIRWAY, NASOPHARYNGEAL (cont'd)

Capable of :

- Facilitate insertion into the nasopharynx in all types of patients assessed as requiring this intervention, with minimal risk of damage to the nasopharynx.

Reference Document:

ANSI Standard:
ANSI Z79.3-1993 Anesthetic Equipment-Oropharyngeal and Nasopharyngeal Airways

L2-005

AIRWAY, OROPHARYNGEAL

A device intended to maintain the patency of respiratory passages through the oral cavity into the pharynx.

Minimum Requirements:

The oropharyngeal airway must:

- Be constructed of pliable, transparent non-latex medical grade material with a buccal end (flanged end) – the end of the airway that is flanged and is expected to fit between the teeth or gums. The pharyngeal end – the end of the airway that is intended to be inserted into the patient's pharynx;
- The oropharyngeal airways should have sufficient rigidity to keep the base of the tongue in a forward position while the airway is in use;
- The oropharyngeal airway shall have sufficient rigidity at the buccal (flanged) end (by use of an insert, if necessary) to prevent collapse when bitten by the patient.
- Be of one piece design, in various sizes, based on length and internal tube diameter. Be available in infant (50 or 55 mm), small child (60 mm), child (70 mm), small adult (80 mm), adult (100 mm) and large adult (115 mm) sizes;
- Be single (Gudel) or double lumen (Berman) type;
- The oropharyngeal airway shall be packaged as sterile in properly sealed packages capable of maintaining the sterile integrity of the airway under normal conditions of shipping and storage. The word "Sterile" shall be readily apparent on examination;

L2-005

AIRWAY, OROPHARYNGEAL (cont'd)

- Individually packaged, for single use, such packages shall be marked "Single Use Only" or "Do Not Reuse" . The size of the airway shall be readily apparent on examination of the package. The size of the airway should be marked on the package label in bold print for ease of identification;

- Allow easy recognition and clearing of blockage of the lumen by secretions, blood, emesis, etc.

Capable of:

- Facilitate insertion into the oropharynx in all types of patients assessed as requiring this intervention, with minimal risk of damage to the teeth, and the soft tissues of the mouth and oropharynx;

Reference Document:

ANSI Standard:
ANSI Z79.3-1993 Anesthetic Equipment-Oropharyngeal and Nasopharyngeal Airways

L2-010

AUTOMATIC TRANSPORT VENTILATOR

Minimum Requirements

The automatic transport ventilator must:

- Fit into the first response kit and be capable of interfacing with the ambulance conversion design;
- Be compatible with both one and two person cardio-pulmonary resuscitation (C.P.R.);
- Allow the rescuer to place two hands on the mask during the inspiratory phase for both manual and automatic ventilation;
- Be capable of providing automatic ventilation to both adults and children within the scope of the relevant standards of patient care for this type of device;
- Be capable of manual ventilation (in line with the current Journal of American Medical Association Recommendations & Guidelines);
- Have a manual ventilation control situated so that both hands of the rescuer can remain on the mask, during actuation of the control;
- Deliver a tidal volume range of 0.2 - 1.1 (+/- 20%) litres while maintaining a constant I:E ratio of 1:2;
- Provide a respiratory rate range of 12 - 20 breaths (+/- 20%)per minute while maintaining a constant I:E ratio of 1:2;
- Have a single control for simultaneous adjustment of rate and volume;
- Allow selection of manual ventilation, or the automatic settings, while allowing the operator to maintain a mask to face seal with both hands;

L2-010

AUTOMATIC TRANSPORT VENTILATOR (cont'd)

The automatic transport ventilator must (cont'd):

- Follow the ISO (International Standards Organization) 8382-1988 Standard and include a functional test at -40°C during stage A.5.19.2.2 of this Standard, prior to the unit being raised to the next temperature. Test data supporting this procedure must accompany the unit;
- Be constructed such that parts of the ventilator cannot be mis-assembled;
- Be durable. Ensure components are unaffected when dropped from a height of one metre onto concrete in-line with the requirements of current ISO 8382-1988 6.4.1;
- Provide an audible pressure relief alarm that is triggered at 60 cm H2O and which vents the remaining gas to atmosphere;
- Not adversely affect the operating capabilities normally associated with oxygen delivery equipment used within the land ambulance system;
- Meet all current International, Federal and Provincial standards for automatic oxygen ventilators;
- Meet the regulations and guidelines outlined by The Journal of the American Medical Association (Oct. 1992) and The Ontario Heart and Stroke Foundation;
- Have the ability to provide "Demand Breathing" in accordance with ISO 8382-1988 8.10 and meet the Canadian Standards Association standard 8382.

L2-015

BAG-VALVE MASK KIT, PEDIATRIC

Minimum Requirements:

The resuscitator must consist of the following components:

- One child ventilation bag with at least 450 ml capacity;
- T-Assembly pop-off pressure relief valve;
- One patient non-rebreathing valve with single diaphragm;
- One intake valve;
- One child inflatable cuff type resuscitation mask and one infant inflatable cuff type resuscitation mask;
- One 1200 ml reservoir assembly with valve unit;
- One carrying case.

The resuscitator must:

- Maintain the normal dimensions, configuration and operational performance characteristics of all components, by resisting deterioration caused by ageing, storage conditions, temperature extremes and atmospheric conditions;
- Be constructed of material that must not exhibit memory characteristics;
- Be constructed of materials capable of being cleaned and disinfected, utilizing methods and agents normally and readily available to ambulance service operators;
- Be suitable for one hand operation providing a minimum volume of 300 ml. It must be capable of re-expanding fully from a complete compression at least 50 times/minute;

L2-015

BAG-VALVE MASK KIT, PEDIATRIC (cont'd)

The resuscitator must cont'd:

- Have a standard 22mm outside diameter and 15mm inside diameter fitting to attach to the face masks. The masks must be transparent, seal effectively and conform well to the face;
- Admit air rapidly through the inlet valve and not allow it to escape unless the bag is compressed;
- Have an integral oxygen stem attached to the inlet valve which must allow gas to flow into the intake valve when used with oxygen and vent excess oxygen to the atmosphere;
- Have a non-rebreathing valve which includes a single diaphragm to prevent rebreathing of the patient's exhaled gas;
- Allow the patient to breath freely from the atmosphere should the bag become occluded;
- Not allow the non-rebreathing valve to jam despite temperature extremes, moisture, or supplemented oxygen inflow as great as 15 litres per minute;
- Resist jamming due to the presence of debris;
- Be constructed of transparent components with a standard 15/22mm fitting at the patient end;
- Be easy to disassemble and clean, with components designed to prohibit incorrect assembly;
- Not exceed 10 ml valve dead space;
- Have a dead space for the valve and mask not exceeding 175ml;
- When used independently, supply normal room air (21% O2) without supplemental oxygen flow;

L2-015

BAG-VALVE MASK KIT, PEDIATRIC (cont'd)

The resuscitator must (cont'd):

- When used with supplemental oxygen, without any oxygen reservoir, concentrations in excess of 40% oxygen must be achieved;
- With the reservoir assembly attached and supplied with an oxygen inflow of 12 litres per minute, a tidal volume of 500 ml and a cycle rate of 12 cycles per minute, maintain an oxygen concentration close to 100%;
- Be capable of effective functional operation at temperatures of -50°C to 55°C;
- When stored in the original packaging materials, have a storage life of at least five (5) years within a suitable storage area at approximately 50% relative humidity and 20°C;
- Have component parts capable of being disassembled for cleaning and disinfecting and not be adversely affected through the use of cold chemical disinfecting agents;
- Include supportive literature for the device and associated components, all of which must be supplied in a carrying case designed to protect the contents from damage and stabilize the position of the components when carrying case is closed and when being transported in emergency situations;
- Include a suitable grip/handle for the case;
- Include complete operating and user instructions. The instructions shall include a composite illustration of the unit (showing sub-assemblies with their nomenclature), a parts list including part numbers, methods allowed for disinfecting and operating instructions.

L2-020

BAG-VALVE MASK RESUSCITATOR, ADULT

Minimum Requirements:

The resuscitator must consist of the following components:

- One adult ventilation bag with at least 1600 ml capacity;
- One non-rebreathing valve with single diaphragm;
- One intake valve;
- One way exhalation port that vents expired gases to the atmosphere;
- One adult resuscitation mask inflatable cuff type;
- One adult resuscitation mask non-inflatable cuff type;
- One 2600 ml reservoir assembly with valve unit;

The resuscitator must:

- Maintain the normal dimensions, configuration and operational performance characteristics of all components, by resisting deterioration caused by aging, storage conditions, temperature extremes and atmospheric conditions;
- Be constructed of material that must not exhibit memory characteristics;
- Be constructed of materials capable of being cleaned and disinfected, utilizing methods and agents normally and readily available to ambulance service operators;
- Be suitable for one hand operation providing a minimum volume of 1,000 ml. It must be capable of re-expanding fully from a complete compression at least 50 times/minute;

L2-020

BAG-VALVE MASK RESUSCITATOR, ADULT (cont'd)

The resuscitator must (cont'd):

- Have a standard 22 mm OD and 15mm ID fitting to attach to the face mask. The mask must be transparent, seal effectively and conform well to the face;
- Admit air rapidly through the inlet valve and not allow it to escape unless the bag is compressed;
- Have an integral oxygen stem attached to the inlet valve which must allow gas to flow into the intake valve when used with oxygen and vent excess oxygen to the atmosphere;
- Have a non-rebreathing valve which includes a single diaphragm to prevent rebreathing of the patient's exhaled gas;
- Allow the patient to breath freely from the atmosphere should the bag become occluded;
- Not allow the non-rebreathing valve to jam despite temperature extremes, moisture, or supplemented oxygen inflow as great as 15 litres per minute;
- Resist jamming due to the presence of debris;
- Be constructed of transparent components with a standard 15/22 mm fitting at the patient end;
- Be easy to disassemble and clean, with components designed to prohibit incorrect assembly;
- Not exceed 10 ml valve dead space;
- Have a dead space for the valve and mask not exceeding 175 ml.;
- Not limit pressure of manually operated bag;

L2-020

BAG-VALVE MASK RESUSCITATOR, ADULT (cont'd)

The resuscitator must (cont'd):

- When used independently, supply normal room air (21% O2) without supplemental oxygen flow;
- When used with 12 litre per minute supplemental oxygen, without any oxygen reservoir, concentrations in excess of 40% oxygen must be achieved;
- With the reservoir assembly attached and supplied with an oxygen inflow of 12 litre per minute, a tidal volume of 500 ml and a cycle rate of 12 cycles per minute, maintain an oxygen concentration in excess of 100%;
- Be capable of effective, functional operation at temperatures of -50°C to 55°C;
- When stored in the original packaging materials, have a storage life of at least five (5) years within a suitable storage area, at approximately 50% relative humidity and 20°C;
- Have component parts capable of being disassembled for cleaning and disinfecting and not be adversely affected through the use of cold chemical disinfecting agents;
- Include supportive literature for the device and associated components, all of which must be supplied in a carrying case designed to protect the contents from damage and stabilize the position of the components when carrying case is closed and when being transported in emergency situations;
- Include a suitable grip/handle for the case;
- Include complete operating and user instructions. The instructions shall include a composite illustration of the unit (showing sub-assemblies with their nomenclature), a parts list including part numbers, methods allowed for disinfecting and operating instructions.

L2-025

BLOOD PRESSURE CUFF, ADULT

Minimum Requirements:

The adult blood pressure cuff must:

- Be constructed of washable material;
- Have a 14cm cuff with velcro closure indexed for sizing/positioning;
- Have a pneumatic pressure gauge equipped with a fastener to attach to the cuff;
- Have a non-pin indexed gauge with a range of 0-300mmHg;
- Have an inflation bulb equipped with a pressure release control knob;
- Be provided with a storage pouch;
- Be capable of being disinfected.

L2-030

BLOOD PRESSURE CUFF, PEDIATRIC

Minimum Requirements:

The pediatric blood pressure cuff must:

- Be constructed of washable material;
- Have a 35cm x 11.4cm cuff with velcro closure; indexed for sizing/positioning;
- Have a non-pin indexed gauge with a range of 0-300mmHg;
- Have an inflation bulb equipped with a pressure release control knob;
- Be provided with a storage pouch;
- Be capable of being disinfected.

L2-035

BURN KIT, (DISPOSABLE, EMERGENCY)

Minimum Requirements:

The burn kit must be sterile and contain:

- 1 burn sheet approximately 150 cm x 225 cm;
- 2 burn sheets approximately 75 cm x 75 cm;
- 2 burn sheets approximately 37 cm x 37 cm individually wrapped, lint-free, hydrophilic dressing, minimum 6 mm thickness, contain no known hazardous materials and be marked as to size;
- 2 pairs of CGSB (Canadian General Standards Boards) approved or equivalent non-latex, sterile, synthetic, powder-free, disposable, large examination gloves;
- 2 surgical masks;
- 4 rolls of conforming gauze;
- 2 x 500 ml of saline USP (U.S. Pharmacopoeia), or sterile water USP (U.S. Pharmacopoeia);

The burn sheet material must:

- Be strong enough when wet or dry to not tear easily during application or removal;
- Be non-adherent to the site of the injury, and must not readily decompose, polymerize, or react;
- Not repel water;
- Not contain hazardous materials;

L2-035

BURN KIT, (DISPOSABLE, EMERGENCY) (cont'd)

The burn sheet material must:

- Be individually wrapped, lint free and size marked clearly.

The burn kit container must:

- Be constructed of sturdy crush-resistant material;
- Be able to be safely stored and secured in the vehicle;
- Be 30.5 cm x 23cm x 9.5 cm inner shell, 10.5 cm outer shell;
- Be labeled "burn kit" with contents itemized;
- Be labeled with expiry date and lot number;
- Be sealed with shrink wrap.

L2-040

CARDIO-PULMONARY RESUSCITATION (C.P.R.) BOARD

Minimum Requirements:

The board must:

- Be highly visible
- Have flotation capability
- Have textured non-slip surface
- Be made of plastic

The board should have the following approximate dimensions / tolerances:

- 65 cm in length
- 41.58 cm in width
- 7 cm - top thickness
- 1.8 cm - end thickness
- 3.5 kg in weight

L2-045

CERVICAL COLLAR

Minimum Requirements:

The collar must:

- Be asymmetrical and of a one piece, fold flat design;
- Be composed of high density polyethylene (or equivalent) materials;
- Have permanent re-usable locking fasteners;
- Have foam padding at all points of contact with the patient;
- Have an anterior opening to allow visualization of the anterior area of the neck and palpation of the carotid pulse;
- Incorporate a method (either as part of the collar or via a separate external device) for determination of required collar size, prior to application;
- Be available in a variety of sizes to fit infants and adults and accommodate various neck types;
- Be x-ray translucent;
- Be approved and registered by Medical Devices, Health Protection Branch, Ottawa;
- Be accompanied by appropriate documentation (research, field studies or other acceptable assessments) supporting product claims regarding the immobilization and neutral alignment of the cervical spine.

L2-045

CERVICAL COLLAR (cont'd)

The collar design and materials must:

- Ensure easy and efficient use (for sizing, application and removal) while allowing minimal manipulation of the neck;
- Provide rigid, effective immobilization of the cervical spine while maintaining neutral alignment of the neck to the maximum degree possible in all planes, most particularly in the planes of flexion and extension;
- Allow easy cleaning with normally available cleansers and disinfectants;
- Ensure minimal absorption of blood or other body fluids.

L2-050

COLD PACK

Minimum Requirements:

The cold pack must:

- Be contained in a double wall plastic bag that measures 25 cm x 15cm;
- Be comprised of sodium nitrate and water;
- Remain cold for a minimum of 30 minutes at 2°C.

L2-055

COT, LIFT ASSIST

Minimum Requirements:

The lift assist cot must:

- Have low foot end lifting frame to ensure better leverage;
- Have fold down head end frame;
- Have an adjustable back rest from 0 to 75 degrees;
- Have a built in shock position;
- Have swing away side arms, (for easy sheet draws), no pinch points and avoid blood born pathogens);
- Conform to specifications "Ontario Provincial Land Ambulance & Emergency Response Vehicle Standard", Vehicles in Regulations as they pertain to the ambulance cot retention system.
- Have 4 (four) omni-directional wheels with solid rubber, or better tires, one mounted at each corner of the frame;
- Dimensions / tolerances:
  - Length, maximum - 201 cm (79")
  - Length, minimum - 155 cm (61")
  - Width - 61 cm (24")
  - Height, maximum - 102 cm (40.25")
  - Height, minimum - 24 cm (9.25")
  - Floor to loading wheels - 80 cm (31.50")
  - Weight - 34 kg (75 lbs)
  - Maximum load - 181 kg (400 lbs)

L2-060

COT, MULTI LEVEL LIFT-IN

Minimum requirements:

The lift-in cot must:

- Be constructed of tubular and bar aluminum;
- Be height adjustable with either a foot end or side mounted release handle, between heights of 12" and 32" above floor level;
- Have an adjustable back rest to accommodate a variety of positions from supine to almost upright;
- Provide a shock position that allows the lower extremities to be raised 25 degrees;
- Provide a contour position, operated by a crank handle located at the foot end of the stretcher frame, that will allow it to be raised under a patient's knees for patient comfort and stretcher manoeuvrability;
- Have side safety arms that raise and lower, with lock pins that lock automatically in the raised position;
- Have a telescoping handle at the head end that will manually telescope in when the head of the stretcher is raised and out when head is lowered;
- Conform to specifications "Ontario Provincial Land Ambulance & Emergency Response Vehicle Standard", Vehicles in Regulations as they pertain to the ambulance cot retention system.
- Have 4 (four) omni-directional wheels with solid rubber, or better tires, one mounted at each corner of the frame;

COT, MULTI LEVEL LIFT-IN (Cont'd)

- Dimensions / tolerances:
  - * Length, maximum - 195 cm (76 1/2")
  - * Length, minimum - 145 cm (56 3/4")
  - * Width - 60 cm (23 1/2")
  - * Height, maximum - 82 cm (32")
  - * Height, minimum - 31 cm (12")
  - * Weight - 26 kg (58 lbs)
  - * Maximum load - 182 kg (400 lbs)

L2-065

COT, MULTI LEVEL LIFT-IN, RESTRAINING STRAPS

Minimum requirements:

The restraining system must:

- Consist of a 4 piece Tang & Receiver assembly, (i.e. 2 shoulder, 2 waist and 2 leg Tang and Receiver assemblies) to form the complete restraint system;
    - Be constructed of nylon webbing two inches in width;
    - Employ the automotive style "Tang & Receiver" fastening device configuration, with quick release press mechanism 360° swivel capability;
    - Have a minimum extended Tang and strap length of 114 cm (45");
    - Have a minimum extended Receiver and strap length of 38 cm (15");
    - Have a minimum break load of 2727 kg (6,000 lbs) for the weakest component of the restraining system.

L2-070

EYE PAD

Minimum Requirements:

The eye pad must be:

- Sterile;
- Oval shaped;
- Gauze-covered;
- Individually wrapped in a peel down wrapper;
- Large enough to cover the orbital area of an adult eye and when folded in half, to cover the orbital area of a child.

L2-075

FIRST RESPONSE KIT

Minimum requirements:

The kit must contain the following oxygen and accessory equipment:

(a) a Department of Transport Canada and Canadian Transport Commission approved aluminum or steel "D" size medical oxygen cylinder with attached single stage regulator and an automatic transport ventilator with Hansen connector;
(b) one adult bag valve mask resuscitator with 0_2 tubing;
(c) two adult oxygen therapy masks with tubing;
(d) one child oxygen therapy mask with tubing;
(e) one adult oxygen therapy nasal cannula;
(f) two adult resuscitation masks;
(g) six oropharyngeal airways, (one each of six sizes infant, small child, child, small adult, adult, large adult);
(h) one adult blood pressure cuff;
(i) one stethoscope;
(j) one hand operated suction unit.

The kit must contain the following first aid supplies:

(k) one roll of 2.5 cm tape, hypo-allergenic;
(l) ten 10 cm x 10 cm gauze pads;
(m) four 20 cm x 25 cm gauze pads;
(n) three rolls of 10 cm conforming gauze roll;
(o) three rolls of 15 cm conforming gauze roll;
(p) six triangular bandages;
(q) two large pressure dressings;
(r) four small pressure dressings;
(s) two pairs of CGSB (Canadian General Standards Board) approved or equivalent medical grade, unisize, ambidextrous, powder-free, non-latex, synthetic or better, disposable, non-sterile examination gloves;
(t) one sterile saline or water, 500 ml;
(u) one set of oral airways, sizes infant, small child, child, small adult, adult, large adult;

L2-075

FIRST RESPONSE KIT (cont'd)

The kit must contain the following first aid supplies (cont'd):

(v) one regular size cervical collar;
(w) one no-neck size cervical collar;
(x) one roll of 2.5 cm tape, adhesive;
(y) one roll of 5 cm tape, hypo-allergenic;
(z) four eye pads;
(aa) one - antiseptic hand cleanser portable 110-120 ml (4 or 5 oz) squeeze bottle.

The carrying case must:

- Allow for the contents to be contained while the kit is transported and during opening;
- Allow for continued provision of oxygen via both therapy and resuscitation adjuncts during transportation of the patient;
- Be light weight, functional, operationally practical, durable and safe for the work place;
- Have a shoulder strap and carrying handle;
- Allow the kit to remain stable when placed on the ground or other flat surfaces. It should not tip over easily;
- Safely restrain the oxygen cylinder when a force equal to 25 times the weight of a fully loaded oxygen tank, is applied to the oxygen tank holder in any direction;
- Protect the cylinder, regulator and gauge from damage when dropped on the corner nearest the oxygen tank valve from a height of 1.3 m (4ft) to a concrete surface;
- Provide easy access and content visibility;
- Provide for attachment to either lift-in or lift assist cots while transporting a patient to and from the ambulance;
- Be easily cleaned and disinfected;
- Remain water resistant under normal operating conditions;
- Be covered with a non removable 5 cm (2") band of white reflective tape;
- Remain fully functional at -25°C for a minimum of 24 continuous hours;
- Not exceed 3.2 kg. (7 lbs) empty weight.

L2-080

GLOVES, NON-STERILE (SIZES VARIOUS)

Minimum Requirements:

The gloves must be:

- Medical grade, ambidextrous, non-latex synthetic, or better.
- Single use, disposable;
- Powder-free,
- Supplied in sizes to meet needs of all sizes of ambulance workers;
- Meet relevant CGSB (Canadian General Standards Board) standards or equivalent;
- Meet all relevant standards designed to protect health care providers against organisms transmissible via body fluids.

L2-085

GLOVES, STERILE

Minimum Requirements:

The gloves must be:

- Constructed of a hypoallergenic material;
- Medical grade, unisize, ambidextrous, non-latex, powder-free, sterile, synthetic, disposable, or better;
- Single use, disposable;
- In compliance with relevant CGSB (Canadian General Standards Board) standards or equivalent;
- In compliance with all relevant standards for providing protection to the health care provider against organisms transmissible via body fluids.

L2-090

INFANT RESTRAINT DEVICE

A device intended to secure an infant and toddlers (up to 18 kg or 40 lbs) for transport on the main ambulance cot or the portable folding stretcher.

Minimum Requirements:

The infant restraint device must be:

- Constructed of lightweight vinyl;
- Easy to clean;
- Constructed with one-piece webbing straps with quick-release buckles which securely attach the device to the ambulance cot frames at three points;
- Constructed with a five-point harness system which consists of shoulder, chest, and crotch restraints that secure with a single, fast release buckle. All restraints shall be fully adjustable;
- Able to roll up compactly for easy storage in a cupboard of the ambulance;
- Dimensions/tolerances:

Open, flat width	-	48 cm (19")
Open, flat length	-	80 cm (31.5")
Rolled diameter	-	10.2 cm (4")
Rolled length	-	48 cm (19")
Weight	-	1.1 kg (2.5 lbs)
Load limit minimum	-	4.5 kg (10 lbs)
Load limit maximum	-	18 kg (40 lbs)

❖ NOTE: Ferno Pedi-Mate™ currently is the only device which meets this standard.

L2-100

INTRAVENOUS POLE

Minimum Requirements:

The pole must:

- Permit mounting to any location on the cot main frame;
- Be height adjustable;
- Be non magnetic;
- Hold a minimum of four one-litre containers of fluid and two transport IV pumps;
- Fold down along cot mattress for storage, when not in use;
- Have a lock sleeve to secure the IV pole in its upright position;
- Have the following dimensions / tolerances:
  - * Length: maximum - 123.2 cm (48 1/2")
    minimum - 83.8 cm (33")
  - * Weight - 1.59 kg (3.5 lbs)
  - * Load limit - 30 kg (66 lbs)

L2-105

MASS CASUALTY INCIDENT KIT

Minimum Requirements:

The kit must contain the following:

- 1- Emergency Response Guide for Dangerous Goods;
- 2 - Multi-purpose vest;
- 1 - Site co-ordinator vest;
- 1 - Multi-Casualty Incident (M.C.I.) reference cards;
- 50 - Triage tags;
- 2 - Grease pencils;
- 6 - Light sticks with clips

The kit contents must be contained in an orange nylon carrying bag.

L2-110

MUCUS TRAP WITH NEO-SAFE (NEONATE) BULB

Minimum Requirements:

The mucus trap must:

- Be constructed of clear plastic;
- Be sterile, disposable, and individually packaged;
- Have a vial capacity of approximately 20 ml;
- Incorporate a neo-safe bulb or similar feature;
- Have a one-way valve;
- Have a 10 French whistle tip suction catheter;
- Provide an extra cap to seal the vial contents for transport;
- Ensure adequate and safe suctioning of the oral pharynx and nasal pharynx of any neonate who requires suctioning;
- Prevent back flow of mucus into the neonate and prevent cross-contamination between the neonate and the health care provider who is performing the suctioning;
- Ensure no leakage or spillage of the contents of the vial during transport.

L2-115

OBSTETRICAL KIT

Minimum Requirements:

The obstetrical kit must:

- Be packaged in a sterile, waterproof, plastic covering, allowing for immediate access.

- Contain:

  * 2 pairs of CGSB (Canadian General Standards Board) approved or equivalent powder-free, non-latex, sterile, synthetic, disposable, large examination gloves;
  * 1 incontinent pad, 60 cm x 120 cm; sterile and disposable;
  * 2 umbilical cord clamps, sterile;
  * 2 O. B. towelettes;
  * 1 pair of scissors, blunt-tipped, sterile, disposable;
  * 1 obstetrical pad, sterile;
  * 1 receiving blanket, heat retaining, 100% cotton flannelette, white, with no tattered edges;
  * 6 gauze pads, 10 cm x 10 cm, sterile;
  * 1 mucus trap suction, sterile, with neosafe bulb or similar feature;
  * 4 towels, disposable;
  * 2 alcohol preps;
  * 2 twist ties;
  * 2 plastic bags;
  * 2 pairs of forceps, Kelly, sterile, disposable.

L2-120

OXYGEN MASK, ADULT NON-REBREATHER

Minimum Requirements:

The non-rebreather oxygen mask must:

- Be constructed of transparent medical grade material;
- Be disposable and be individually wrapped;
- Have a non-rebreather reservoir bag;
- Include two valves, one on the side of the mask and one between the mask and the reservoir;
- Include oxygen tubing that meets the standard;
- Provide high concentration oxygen (approximately 90%) with between 10-15 litres per minute flow of oxygen.

L2-125

OXYGEN MASK, ADULT SIMPLE

Minimum Requirements:

The Adult simple oxygen mask must:

- Be constructed of transparent medical grade material;
- Be disposable and be individually wrapped;
- Include oxygen tubing that meets the standard;
- Provide medium oxygen concentrations of 40-60%, with between 8-10 litres per minute flow of oxygen.

L2-130

OXYGEN MASK, PEDIATRIC SIMPLE

Minimum Requirements:

The pediatric simple oxygen mask must:

- Be constructed of transparent medical grade material;
- Be disposable and be individually wrapped;
- Include oxygen tubing that meets the standard;
- Provide medium oxygen concentrations of 40-60%, with between 8-10 litres per minute flow of oxygen.

L2-135

OXYGEN NASAL CANNULA

Minimum Requirements:

The nasal cannula must be:

- Constructed of crush resistant, kink free plastic tubing;
- Disposable and individually packaged;
- At least 2 m (7 ft) in length;
- Able to provide a range of oxygen concentrations between 24% and 44%, at oxygen flow rates of between 1 to 6 litres per minute.

L2-140

OXYGEN PRESSURE REGULATOR

Minimum Requirements:

To reduce the operating pressure from the high (2,200+ psi) pressure in an oxygen cylinder, to a consistent static working pressure of 50 psi.

The regulator must:

- Comply with current CGA (Canadian Gas Association) specification, where not otherwise detailed within these minimum requirements;
- Fit into the ambulance conversion design;
- Be constructed of materials compatible with high pressure oxygen use;
- Have input connections that conform to current international standards and be CGA 540 nut and stem for oxygen;
- Have at least one working pressure (55 psi) outlet, equipped with a 9/16"DISS male outlet. No check valve is required.
- Have the cylinder contents gauge marked in both "psi" and "bar" values and provide a marked indicator of the need to refill the cylinder;
- Provide output performance from the 9/16" DISS outlet(s) that maintain a minimum output pressure of 45 psi @ 100 litre per minute flow rate across the operating range of the cylinder (2,200 psi – 500 psi);
- Include an operator's manual and a manufacturer's test sheet indicating final performance values.

❖ NOTE: Oxygen regulators intended for aeromedical use must only be used in conjunction with devices intended and tested for the aeromedical environment.

L2-145

OXYGEN PRESSURE REGULATOR - FIRST RESPONSE KIT

Minimum Requirements:

The regulator must:

- Reduce the operating pressure from the high (2,200+ psi) pressure in an oxygen cylinder, to a consistent static working pressure of 55 psi;
- Fit into the first response kit;
- Be capable of interfacing with the ambulance conversion design;
- Be constructed of materials approved for high pressure oxygen use;
- Have input connections that conform to International Standards Organization (ISO) standards and be "pin-indexed" for oxygen;
- Have a pin indexed yoke attachment that is a "T-Bar" handle or knob secured to the regulator body;
- Have at least one working pressure (55 psi) outlet, equipped with a Hansen LL1 K11 male "check-valve" quick connect outlet;
- Ensure that where applicable, additional working pressure (55 psi) outlets are equipped with 9/16" DISS "check-valve" fitting to prevent the escape of oxygen when not connected to other equipment;
- Have a cylinder contents gauge marked in both "psi" and "bar" values and provide a clearly visible indicator of the need to refill the cylinder;
- Be equipped with a rubberized "gauge guard";
- Provide output performance from the 9/16" DISS outlet(s) with a minimum output pressure of 45 psi @ 100 litre per minute flow rate across the operating range of the cylinder (2,200 psi - 500 psi);

L2-145

OXYGEN PRESSURE REGULATOR (cont'd)

The regulator must (cont'd):

- Have a therapy free flow control providing flow rates between 0.5 - 25.0 litre per minute. Flow rates must be maintained within a +/- 10% band of tolerance across the operating range of the cylinder (2,200 psi - 500 psi);
- Have a therapy free flow outlet that is a "barb-style" which is compatible with the disposable oxygen therapy tubing;
- Have an operator's manual and manufacturer's test sheet indicating performance values.

❖ NOTE: Oxygen regulators intended for aeromedical use must only be used in conjunction with devices intended and tested for the aeromedical environment.

L2-150

OXYGEN SUPPLY TUBING

Minimum Requirements:

The tubing must be:

- Constructed of crush resistant, kink-free plastic;
- Disposable;
- Approximately 2 m (7 ft) in length;
- Vinyl tipped to facilitate connection with oxygen delivery supply and delivery device;
- Able to ensure unimpeded oxygen flow to the patient.

L2-155

PARTICULATE RESPIRATOR MASK

Minimum Requirements:

The mask must:

- Be constructed of a latex free material;
- Be disposable;
- Have an adjustable nose piece and an attachment strap;
- Be fluid resistant to splash and splatter of blood and infectious materials;
- Fit a wide range of face sizes;
- Have a filter efficiency level of 95% or greater against particulate aerosols free of oil;
- Minimize wearer exposure to airborne particles in a size range of .1 to > 10 microns;
- Comply with NIOSH (National Institute of Safety and Health) Standard 42 CFR 84 or better.

L2-160

PRESSURE DRESSING (LARGE)

Minimum Requirements:

The dressing must:

- Be an absorbent, sterile, compress type dressing;
- Be 14 cm x 45 cm x 1 cm in size when opened; (compress)
- Have two conforming gauze stretch ties, permanently affixed to the outer edges of the compress and each tie must be at least 10 cm wide x 80 cm in length.

L2-165

PRESSURE DRESSING (SMALL)

The dressing must:

- Be a sterile, absorbent compress type;
- Be 10cm x 10cm x 1cm in size when opened;
- Be individually wrapped;
- Have two conforming gauze stretch ties, permanently affixed to the outer edges of the compress and each tie must be at least 10 cm wide x 80 cm in length.

L2-170

RESTRAINING STRAPS, COTS & FOLDING STRETCHER

Minimum requirements:

The restraining system must:

- Consist of a 4 complete 2 piece "Tang & Receiver" assembly, (i.e. 2 shoulder, 1 waist, 1 leg Tang and Receiver assemblies) to form the complete restraint system.
- Be constructed of nylon webbing two inches in width.
- Employ the automotive style "Tang & Receiver" fastening device configuration (quick release press mechanism).
- Have a minimum extended Tang and strap length of 114 cm (45").
- Have a minimum extended Receiver and strap length of 38 cm (15").
- Have a minimum break load of 2727 kg (6,000 lbs) for the weakest component of the restraining system.

L2-175

RESTRAINING STRAPS, SCOOP & SPINAL BOARD

Minimum requirements:

The restraining system must:

- Consist of 4 complete 2 piece "Tang & Receiver" assemblies to form the complete restraint system.
- Be constructed of nylon webbing two inches in width.
- Employ the automotive style "Tang & Receiver" fastening device configuration, with quick release press mechanism 360^{0} swivel capability.
- Have quick release hooks that:
  - are plated and have a spring loaded snap closure
  - must fit over a maximum 1 cm (3/8") rod
  - are rated at 364 kg. (800 lbs) test
- Have a minimum extended Tang and strap length of 122 cm (48").
- Have a minimum extended Receiver and strap length of 33 cm (13").
- Have a minimum break load of 1818 kg (4000 lbs).

L2-180

RESUSCITATION MASK, ADULT (INFLATABLE CUFF TYPE)

Minimum Requirements:

The mask must:

- Be circular in shape;
- Be constructed of transparent, flexible plastic;
- Have a standard connection compatible with the adult bag valve mask device;
- Have an inflatable cuff that will seal effectively in a wide variety of facial shapes;

L2-185

RESUSCITATION MASK, ADULT (NON-INFLATABLE CUFF TYPE)

Minimum Requirements:

The mask must:

- Be constructed of transparent, flexible plastic, medical grade PVC or better;
- Have a standard connection compatible with the adult bag valve mask;
- Be of a pliable design that will form an effective seal with any facial size or shape, with the application of a minimal amount of pressure;

L2-190

RESUSCITATION MASK, PEDIATRIC (INFLATABLE CUFF TYPE)

Minimum Requirements:

The mask must:

- Be constructed of transparent, flexible plastic;
- Be available in pediatric and infant sizes;
- Have a standard connection compatible with the pediatric bag valve mask device;
- Have an inflatable cuff that will seal effectively in a wide variety of facial shapes.

L2-195

SCISSORS, PARAMEDIC

Minimum Requirements:

The scissors must:

- Have finely serrated teeth;
- Have molded, polypropylene finger rings;
- Be fully autoclavable;
- Allow ambidextrous use;
- Allow the user to cut all materials encountered during the course of patient care interventions e.g. dressings, bandages, seat belts, splints.

L2-200

SHARPS CONTAINER

Minimum Requirements:

The container must:

- Be of puncture resistant polypropylene construction to ensure unit can be autoclaved or incinerated;
- Have temporary and permanent lid closure capability;
- Have 2 tapered slots and bevelled edge openings for needle disposal, plus one all-purpose opening;
- Be labeled with a "biohazard" label, the colour of which is consistent with current legislative requirements;
- Not contain colouring with heavy metals;
- Have minimum dimensions of 8.75 cm (width) x 16.25 cm (height) x 7.5 cm (depth);
- Include a compatible safety bracket to accommodate the safe mounting of a sharps container as approved for use in Ontario land ambulance services.

L2-205

SPINAL BOARD

Minimum requirements:

The quick connect spinal board must:

- Be constructed of material able to support 400 lbs weight when supported at ends, 183 cm (72") length, 41 cm (16") width;
- Have a surface finish impervious to workplace fluids;
- Have a minimum load capacity of 205 kg (450 lbs);
- Have two offset runners, or equivalent;
- Have runners secured with plastic screws, (x-ray translucent);
- Have runners with a 45° taper at each end;
- Have fiberglass pins, x-ray translucent, located in each handle hold and each pin must be rated at a minimum pull strength of 300 lbs;
- Have at least twelve (12) hand slots, four (4) on each side and two (2) on each end;
- Have bevelled edges to be sanded and sealed in order to prevent injury;
- Have all edges, including hand slots, fully sanded and sealed.

L2-210

SPINAL IMMOBILIZATION EXTRICATION DEVICE

Minimum Requirements:

The spinal immobilization extrication device must:

- Be of a wrap-around design with appropriate carrying handles;
- Be constructed of reinforced vinyl, nylon or better;
- Ensure vertical rigidity;
- Be fully adjustable to accommodate the maximum scope and array of field applications;
- Have a weight capacity of at least 225 kg (500 lbs);
- Be x-ray compatible;
- Include a reinforced vinyl, nylon or better carrying case.

L2-215

SPLINT, MULTI-PURPOSE / MALLEABLE

Minimum Requirements

The multi-purpose splint must:

- Be constructed of rigid material and have rounded edges;
- Be adjustable for arm/lower leg use in adults and arm/leg use in children;
- Be x-ray translucent;
- Be individually packaged with easy to understand instructions;
- Under normal use conditions, support and stabilize injured extremities and maintain alignment in as near neutral position as possible, or maintain the position of splinting.

The malleable splint must:

- Be constructed of a semi-rigid material that will conform when applied to a patient's extremity, shall provide rigid support;
- Be x-ray translucent;
- Be individually packaged with easy to understand instructions;
- Under normal use conditions, support and stabilize injured extremities and maintain alignment in as near neutral position as possible, or maintain the position of splinting.

L2-220

SPLINT, TRACTION

Minimum Requirements:

The traction splint must:

- Be a device that aligns the extremity and limits its motion;
- Be compatible with backboards and stretchers;
- Be light weight and easily stored in the ambulance;
- Permit the emergency medical attendant or paramedic to document exactly how much traction is being applied;
- Automatically adjust to degree of muscle spasm (counter force) in the leg.
- Provide easy to perform orthopedic and vascular assessment of patient when applied;
- Be easily cleaned and decontaminated.

❖ NOTE: Sager Traction Splint™ currently is the only traction splint which meets this standard.

L2-225

STAIR CHAIR

Minimum requirements:

The stair chair must:

- Be constructed of sturdy, lightweight aluminum;
- Fold for easy storage;
- Be covered with a vinyl / nylon material, or better;
- Have non-slip hand grips on all carrying handles. Handles to fold for easy storage;
- Have 2 (two) fixed 4" wheels with solid rubber, or better tires, one mounted at each of the back corners of the frame;
- Dimensions / tolerances:
  - Height: Chair position - 95.25 cm (37 1/2")
  - Height: folded - 61 cm (24")
  - Depth: Chair position - 81 cm (31 3/4")
  - Depth: folded - 16 cm (6 1/4")
  - Weight - 8.2 kg (18 lbs)
  - Maximum load - 159 kg (350 lbs)

L2-230

STAIR CHAIR, RESTRAINING STRAPS

Minimum requirements:

The restraining system must:

- Consist of 2 quick release press mechanism "Tang & Receiver" assemblies, (i.e. 1 set to secure the chest/torso, attached to the chair back, 1 set attached to the seat, to secure patient's upper legs.)
- Be constructed of nylon webbing two inches in width.
- Have a minimum extended Tang and strap length of 114 cm (45").
- Have a minimum extended Receiver and strap length of 38 cm (15").
- Have a minimum break load of 2727 kg (6,000 lbs) for the weakest component of the restraining system.

L2-235

STERILE SALINE OR WATER

Minimum Requirements:

The sterile water must be provided in a transparent, non-breakable, pour bottle or in a bag;

If in a bottle, the bottle must:

- Have a leak proof closure with each open capability;
- Be labelled "For Irrigation Purposes Only";
- Have a capacity of at least 500 ml.

If in a bag, the bag must:

- Be double-bagged;
- Be labeled "For Irrigation or Injection Purposes Only";
- Have a capacity of at least 500 ml.

L2-240

STETHOSCOPE

Minimum Requirements:

The stethoscope must:

- Have a dual head single tube design;
- Have minimum 50 cm of tubing;
- Have protective ear tips;
- Under normal use conditions, provide clear transmission of breath and heart sounds with the bell and the diaphragm side of the stethoscope head.

L2-245

STRETCHER, CANVAS

Minimum Requirements:

The stretcher must:

- Measure approximately – 191 cm x 91.4 cm (75" x 36") with 10.2 cm (4") sleeve;
- Be provided with two two-piece poles that will have a load capacity of 160 kg (350 lbs);
- Allow safe storage in land ambulances;
- Have poles constructed of 2.5 cm aluminum tubing with rubber non-slip handles secured to the ends of each pole;
- Have pole ends with reduced diameter with spring loaded pin locking mechanism. Poles to be 188 cm (74") long assembled, 101.5 cm long disassembled;
- Have canvas made of 100% cotton measuring 180 cm (71") long, by 66 cm (26") wide, with a longitudinal sleeve on each side of the canvas to accommodate the assembled pole ends.

L2-250

STRETCHER, FOLDING

Minimum requirements:

The folding stretcher must:

- Be constructed of tubular aluminum;
- Fold in half longitudinally for easy storage
- Be covered with a vinyl / nylon material, or better;
- Have an adjustable back rest to accommodate a variety of positions from supine to almost upright;
- Have a telescoping handle at the head end that will manually telescope in when the head of the stretcher is raised or for storage and out when head is lowered and when in use
- Have 2 (two) fixed wheels with solid rubber, or better tires, one mounted at each of the foot end corners of the frame;
- Dimensions / tolerances:
  - Length, folded - 95.25 cm (37 1/2")
  - Length unfolded - 186.8 cm (73 1/2")
  - Width - 48.3 cm (19")
  - Height - 15.2 cm (6")
  - Weight - 7.3 kg (17 lbs)
  - Maximum load - 159 kg (350 lbs)

L2-255

STRETCHER, FOLDING, RESTRAINING STRAPS

Minimum requirements:

The restraining system must:

- Consist of a 4 complete 2 piece Tang & Receiver assembly, (i.e. 2 shoulder, 1 waist, 1 leg Tang and Receiver assemblies) to form the complete restraint system;
- Be constructed of nylon webbing two inches in width;
- Employ the automotive style "Tang & Receiver" fastening device configuration (quick release press mechanism);
- Have a minimum extended Tang and strap length of 114 cm (45");
- Have a minimum extended Receiver and strap length of 38 cm (15");
- Have a minimum break load of 2727 kg (6,000 lbs) for the weakest component of the restraining system.

L2-265

STRETCHER, SCOOP

Minimum requirements:

The scoop stretcher must:

- Be adjustable to accommodate patients of various sizes;
- Be designed with a narrow foot-end frame;
- Be equipped with quick connect pins;
- Be lightweight and designed to fold in half longitudinally;
- Be of an open-centre design to permit patients to be x-rayed while on the scoop stretcher;
- Have a concave surface that cradles the patient providing support and minimizing lateral movement;
- Must be of the following dimensions:

* Length:	open maximum	-	201 cm (79")
	open minimum	-	168 cm (66")
	folded	-	119.4 cm (47")
* Width		-	43 cm (16 3/4")
* Depth, folded		-	8.75 cm (3 1/2")
* Height, open		-	7.5 cm (3")
* Weight		-	9 kg (20 lbs)
* Load limit		-	159 kg (350 lbs)

L2-270

SUCTION CATHETER

Minimum Requirements:

The catheter must:

- Be sterile;
- Be constructed of straight, clear medical grade material;
- Be of two-eyed design, with a finger control valve;
- Be individually packaged;
- Be of single patient use;
- Be designed and constructed of materials that must ensure adequate and efficient suctioning of the naso and oropharynx to the depth visible by the user;
- Be available in the various sizes specified, i.e. 10 and 14 F (each 50 cm – 55 cm in length).

L2-275

SUCTION TIP, WIDE BORE (ORAL)

Minimum Requirements:

The suction tip must:

- Be disposable;
- Be constructed of appropriate medical grade material;
- Be at least 15 cm long;
- Have an internal diameter of approximately 1cm at the distal end of the tip, and an external diameter at the proximal end to facilitate attachment of suction tubing;
- Have a thumb activated suction control port near the proximal end;
- Have a flexible and fluted distal end to facilitate safe suctioning;
- Have a suction tip able to safely and efficiently clear the oropharynx of large particulate matter and other types of thick emesis and minimize risk of damage to the teeth, and the soft tissues of the mouth and oropharynx.

L2-280

SUCTION TIP, YANKEUR

Minimum Requirements:

The suction tip must:

- Be disposable, sterile and individually packaged;
- Be constructed of rigid, transparent, medical grade plastic;
- Have a thumb control port;
- Have a main inlet port at the distal end, with an opening of not less than 5mm;
- Have an external diameter at the proximal end to facilitate attachment of suction tubing;
- Have a suction tip able to safely and efficiently clear the oropharynx of mucus, fluid, liquid emesis and small particulate matter and minimize risk of damage to the teeth, and the soft tissues of the mouth and oropharynx;

L2-285

SUCTION UNIT, DISPOSABLE COLLECTION BAG

Minimum Requirements:

The collection bag must:

- Be compatible with vehicle mounted suction units currently in use in land ambulance vehicles, with respect to configuration, size (folded and unfolded), thickness and fabrications;
- Be constructed of materials and designed to ensure no spillage or leakage of suctioned fluids or matter;
- Provide a sealed, airtight container for transport of potentially biohazardous material.

L2-290

SUCTION UNIT, HAND OPERATED

Minimum Requirements:

The suction unit must:

- Offer rapid disassembly and assembly;
- Minimize potential incorrect assembly;
- Permit storage in the first response kit;
- Permit placement of the suction unit that must not compromise the access or storage of current first response kit components;
- Continue to operate even when collection canister is full;
- Be compatible with industry standard suction catheters and connectors;
- Be operable by one Emergency Medical Attendant or Paramedic, using one hand;
- Have a minimum collection capacity of 200 ml.;
- Have a suction tip, minimum 8 mm internal diameter;
- Have a suction tip that must minimize risk of damage to the teeth, and the soft tissues of the mouth and oropharynx;
- Be compatible for use with the following patients:

Adult:	-	12 years and up
Child:	-	12 months to 12 years
Infant:	-	up to 12 months

- Provide up to 300 mmHg. vacuum;
- Provides 20 litres per minute airflow;
- In a simulation, evacuate 200 ml. of vomit in 10 seconds or less.

L2-295

SUCTION UNIT, TUBING

Minimum Requirements:

The tubing must:

- Be constructed from clear, non-conductive medical grade material;
- Be at least 182 cm in length (6 ft);
- Be disposable;
- Have an inside diameter of 7.0 mm and an outside diameter of 10.0 mm;
- Withstand a vacuum of 559 mmHg. without the wall collapsing;

L2-300

SUCTION UNIT, VEHICLE MOUNTED

Minimum Requirements:

The suction unit must:

- Wall mounted (interior wall);
- Be compatible with industry standard suction catheters and connectors;
- Be low energy consumption;
- Have a disposable bag type collection jar minimum capacity of 1.1 litres, that allows for easy disposal of aspirate;
- Be supplied with a control panel complete with on / off switch that will control power supply, a 'power on' light, a vacuum gauge control switch and circuit breaker;
- Be supplied with a vacuum gauge that will register 0 - 550 mmHg;
- Allow 16 litre per minute airflow at 200 mmHg., and 31 litre per minute airflow at 550 mmHg;
- Have a suction tip that will minimize risk of damage to the teeth, and soft tissues of the mouth and oropharynx.

L2-305

WALL OXYGEN FLOWMETER

Minimum Requirements:

The flowmeter must:

- Comply with current CGA (Compressed Gas Association) specification where not otherwise detailed within these minimum requirements;
- Fit within the ambulance conversion design;
- Be constructed of materials compatible with high pressure oxygen use;
- Have input connections that conform to current international standards and be female 9/16" DISS hand or wrench-tight style;
- Have at least one working pressure outlet, equipped with a Hansen LL1K11 male "check-valved" quick connect outlet;
- Ensure any additional working pressure outlets are equipped with (9/16") DISS "check-valved" fitting to prevent the escape of oxygen should the fitting not be connected to ancillary equipment;
- Be back-pressure compensated and calibrated to provide a 0 - 15.0 litre per minute flow range. "Flush" flow must be at least 75 litre per minute. Flowrates must be maintained with a +/- 10% band of tolerance across the operating range of the cylinder (2,200 psi – 500 psi).
- The flowmeter free flow outlet must be male 9/16" DISS located at the bottom of the thorpe tube, and compatible with commercially available "barb-style" nipple adapters and humidifiers.
- Include an operator's manual and a manufacturer's test sheet indicating final performance values, must accompany the product.